A typology of education and training provisions for low educated adults

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Studies in the Education of Adults

A typology of education and training provisions for low educated adults: categories and definitions

ABSTRACT

It is Europe's ambition to be a strong knowledge based economy. The European Commission recognises the role of lifelong learning in achieving this aim. However, exploring participation rates in post-compulsory learning, it is clear that access to education and training is unequally distributed in society. We know that participation rates vary by socio-economic and socio-demographic groups, as well as by country. However, the role of education and training institutions in facilitating and enabling participation is less well known and deserves further in-depth attention. In order to fill this gap, we scrutinised definitions and categorisations of adult education provisions as published by the leading international organisations in the field of education and training. We paid specific attention to opportunities available for the lowest educated adults in society. Based on our review, we constructed a new typology consisting of seven categories for addition to the knowledge base and use in our own Horizon 2020 project. The categories are: (1) basic skills and basic education, (2) second chance education at upper secondary levels, (3) post-secondary VET, (4) apprenticeships, (5) training that forms part of Active Labour Market Policies, (6) workplace or job-related learning and (7) personal or social learning.

INTRODUCTION

This paper presents and discusses a new seven categories typology of adult education provisions available for the lowest educated adults in society. Participation statistics in the field of adult lifelong learning demonstrate that those with the lowest levels of qualifications, from the lowest socio-economic backgrounds and in the least knowledge intensive jobs do not strongly engage with education and training (see e.g. Desjardins et al., 2006; OECD, 2013). Apart from focussing on their individual characteristics, it is also important to shed more light on the education and training *opportunities* available to them. This is one of the aims of the EUR 2.5 million Horizon 2020 project ENLIVEN 'Encouraging Lifelong Learning for an Inclusive and Vibrant Europe', and especially the Second Work Package, which focuses on broad aspects of lifelong learning policies, funding, participation and

employment of mainly the younger and most vulnerable adults. Exploring determinants of participation, it is clear from a wide range of surveys that educational attainment is the top determinant (see Author, 2016). As such, in this part of the project (Work Package 2), we were mainly interested in those *who did not finalise secondary education or who did not have the starting qualifications to continue their educational pathways into tertiary education*. It is generally perceived that these adults could benefit from participating in adult education, for example in order to improve their employability and their financial prospects as they tend to have combined disadvantages in many other life domains (see e.g. Field, 2012; Laal & Salamati, 2012). Empowerment, active citizenship and better health have also been recognised as benefits of educational participation in the international literature. In recent years, the European Commission has strongly focussed on the need to evolve into a lifelong learning society. Adults need to be able to catch up with the needs of the knowledge-intensive economy and to contribute to stronger levels of social inclusion (see e.g. Óhidy, 2008; Holford and Spolar, 2012; European Commission, 2011). As such, by 2020, at least 15 percent of the adult population should participate in at least one adult learning activity on a four weeks' basis. The number of school drop-outs leaving compulsory education without a qualification of secondary education should decrease as well (Author, 2016). Progress towards these benchmarks is being carefully monitored based on statistics produced by the European Commission and the OECD (the Organisation for Economic Cooperation and Development). It forms part of the strong 'governance by numbers' approach, which aims to put countries under pressure that underperform in the rankings (see Dehmel, 2006; Ioannidou, 2007; Lee, Thayer and Madyun, 2008; Grek, 2009). As will be demonstrated below, participation does not happen automatically. In order for adults to participate in educational activities, high quality education and training offers need to be available to them. More in-depth understanding on the role of these providers is welcomed in order to understand how to support adults in a more efficient and effective way. In order to have a clear overview of the different types of education and training provisions available to these adults, we wanted to investigate the range of existing education and training typologies available in the policy-oriented and academic literature. Furthermore, we wanted to know how far these typologies are specific in focussing on education and training provisions to fulfil the needs of the lowest educated adults in society.

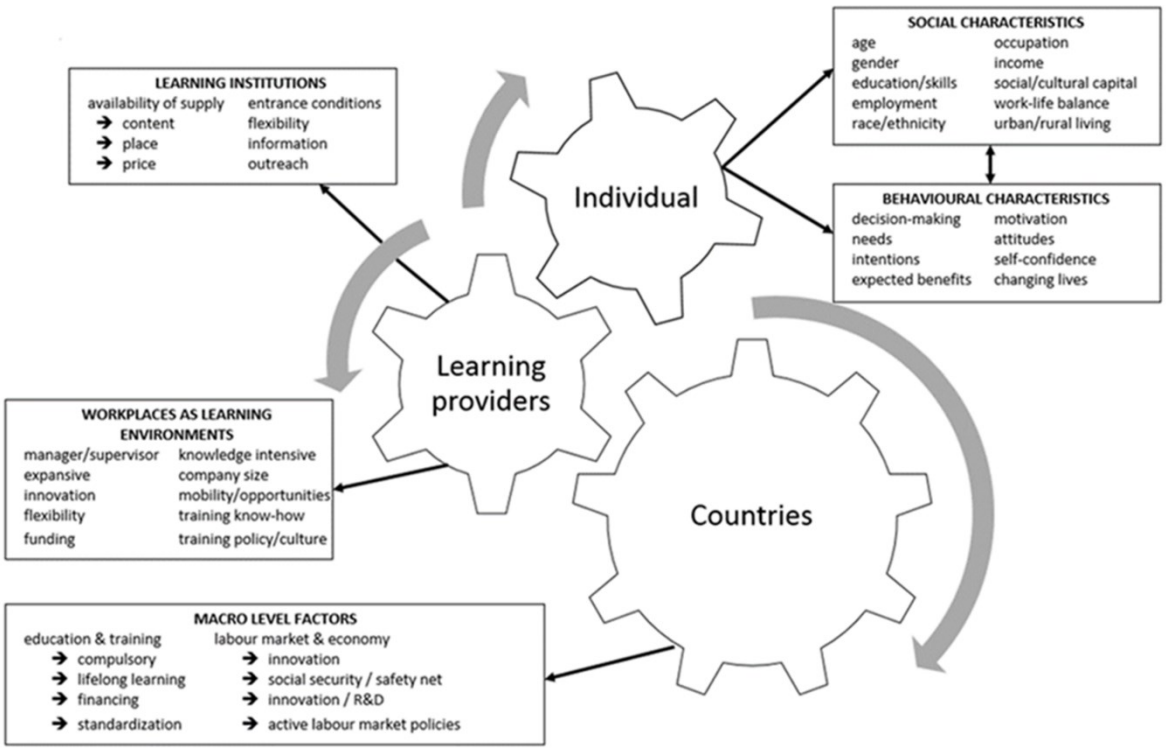
Before discussing the results of our review, and presenting the seven categories of our new typology, we provide a more detailed discussion on the role of educational provisions in

generating participation in education and training. Afterwards, we discuss our methods of review in order to outline our analytical approach.

THE ROLE OF PROVISIONS IN ADULT EDUCATION PARTICIPATION

Understanding why adults do or do not participate in educational activities is rather complex, but has been intensively studied by one of the authors of this paper (author reference). In fact, participation is the result of an interplay between the individual potential learner, the educational provisions available to him/her and the country context in which s/he lives. The Comprehensive Lifelong Learning Participation Model (see Figure 1) represents the interplay between these three levels through three 'cogs' which need to interact with each other.

[SEE FIGURE 1 HERE]



At the individual level, adults have their own socio-economic and socio-demographic characteristics and it is clear from the literature that participation in adult education is a Matthew effect (Nesbit, 2005; Desjardins, Rubenson and Milana, 2006; Brookfield, 2010; Evans, Schoon and Weale, 2013; Kaufmann and Widany, 2013; Kyndt and Baert, 2013). Those who have already accumulated education credentials, known to strongly relate with middle class dynamics, will obtain more of them, widening the gaps between working-class

and middle-class adults even further. The engagement of highly educated adults in knowledge intensive jobs, core indicators of social class, furthers their participation in adult education even more. Based on previous research findings, e.g. by Macionis (2013), Sheared, Johnson-Bailey, Colin, Peterson and Brookfield (2010), White (2012) and Author (2018), we can also state that participation - especially in workplace learning - remains racialized and gendered, as women and adults from non-white backgrounds receive fewer learning opportunities, even when they are highly educated. However, this is often mediated through educational attainment, the top determinant. Highly educated foreign-born adults participate more in educational activities than native-born low-educated adults, but keep on experiencing a disadvantaged compared to native-born high educated adults (Author, 2018). Foreign-born adults and women have more difficulties in breaking glass ceilings and receiving equal opportunities, and this then has its further effect on participation in education and training. At the same time, adults have their own behavioural characteristics as well, which tend to be influenced by their educational past. Adults who have been successful learners are more likely to be motivated to learn more, have gained a positive attitude towards learning and feel confident they will be able to finalise a course successfully (see e.g. Baert, De Rick and Van Valckenborgh, 2006). At the individual level, barriers encountered by adults can thus be dispositional, but also situational, e.g. when young parents feel discouraged to participate in an adult education course because of changed priorities and lack of time (Cross, 1981).

Evidence on the low participation rates of the lowest educated adults in society is clear, based on data from international surveys such as the Eurostat Adult Education Survey, the Labour Force Survey or data from the OECD's Programme for the International Assessment of Adult Competencies (author reference). However, while individual characteristics of adults, especially their educational attainment, largely predicts their (non-)participation, it is also important to recognise that educational provisions themselves can also act as strong institutional barriers or enablers, encouraging or preventing adults from engaging with educational activities . Unfortunately, this information on educational provisions is not strongly or only vaguely available in the existing datasets – as will be further explored below – and it is therefore important to devote more attention to the role of adult education provisions as important players in the generation of adult education participation (Author, 2016). This is represented in the left upper cog of the Comprehensive Lifelong Learning Participation Model (see Figure 1). For example, we can refer to education and training institutions in a formal or non-formal sense, but also to workplaces as generators of education

and training activities. These learning providers can make it difficult to potential learners to access their courses if they offer their programmes in non-flexible modes, ask high enrolment fees or do not provide adults with learning routes adapted towards their needs in combining learning with work and family commitments (see e.g. Schuetze and Slowey, 2002). Similar mechanisms are in place at work (see e.g. Hefler and Markowitsch, 2008; Fuller and Unwin, 2011). Some employers are rather restrictive in the learning opportunities they offer to their employees, e.g. through only allowing them to develop themselves in relation to the specific job tasks they need to undertake. This is in contrast to the mode of operation of expansive working environments that put more focus on the development of general and transferrable skills. It is usually the lowest educated adults in the most elementary occupations who receive fewer opportunities for further participation.

The provision of education and training activities is also likely to happen in relation to the education policies available in the country. The availability of training initiatives is linked to the strength of the economy and the existence of active labour market policies (see Almeida and Aterido, 2008; Bassanini, Booth, Brunello, De Paola and Leuven, 2005; Brunello, 2001; Coulombe and Tremblay, 2007; Dammrich, Vono De Vilhena and Reichart, 2014; Groenez, Desmedt and Nicaise, 2007; Wolbers, 2005). This partly explains why participation rates in adult education are much higher in the social-democratic Scandinavian countries compared to e.g. in Southern European Mediterranean countries. The Nordic model is known to be more inclusive, to have lower inequalities between people and to have a stronger embedded lifelong learning culture.

Understanding the role of education and training provisions in stimulating the uptake of adult education largely remains a black box in the international participation literature (see author). This is especially problematic in relation to the lowest educated adults in society who largely miss out on furthering their education. The first step in increasing knowledge in this area is to explore the *availability of education and training provisions*. As such, this paper is interested in answering the following tow question

- *What typologies of education and training provisions for adults are available in the literature?*
- *How far have these typologies focussed on the need for the lowest educated adults to further their education and training in adulthood?*

METHOD OF REVIEW

In better understanding the landscape of education and training provisions, we explored both the policy-oriented in Europe and the academic literature as well. In relation to the policy-oriented literature, we focussed on key documents mentioning the importance of adult education as published by the OECD, the European Commission – including the Eurydice network and work by CEDEFOP, the European Centre for the Development of Vocational Training – and UNESCO. We also as explored codebooks of their surveys, more specifically PIAAC's Survey of Adult Skills, the Labour Force Survey, the Adult Education Survey and the Continuing Vocational Training Survey, in order to further understand the way in which adult learning activities are being defined. We started by exploring general definitions of lifelong learning, classifications of learning provisions in surveys and the policy-oriented literature as well as classifications being found in the academic literature. We used a documentary analysis technique in which documents were scrutinized for categorisations of educational provision. In the first instance, we explored general typologies and reported them in separate tables for comparison. In the second instance, we explored the focus on low-educated adults in the different categories available in the existing typologies. As all typologies scrutinized for the purpose of this review seem to be generic in nature, we decided to come up with a new seven categories typology of education and training provisions available to the lowest educated adults in society.

EXISTING CATEGORISATIONS OF EDUCATION AND TRAINING PROVISIONS

Categorisations of adult education and training provisions

'Lifelong learning' is a rather broad concept, focussing on learning from cradle to grave, but also being life-wide in nature instead of simply being life-long. It often refers to the well-known categorisation of learning into formal, non-formal and informal learning (Colley et al., 2003; Werquin, 2007). Generally speaking, formal learning refers to learning in formalised educational contexts which are credential-based. Non-formal learning takes place in organised settings as well, but is not credential-based. Informal learning happens at random and is more likely to be non-intentional. As such, starting from an interest in types of education and training provisions, we were mainly focussed on examples of formal and non-formal adult education, instead of focussing on informal types of lifelong learning. This is also in line with the way in which the European Commission monitors adult participation in

education and training. However, because of its broad focus, the distinction between formal, non-formal and informal is in fact not very helpful in furthering our understanding on the role of education and training providers in generating higher levels of participation. As such, our need to further break this down.

Another way of understanding the different types of educational provisions available to adults is to explore how these are being conceptualised in the large scale surveys. As mentioned above, survey data are nowadays perceived as powerful policy-influencing tools. For the purpose of this review, we explored the codebooks of the PIAAC dataset, the Adult Education Survey, the Labour Force Survey and the Continuing Vocational Survey. We found that, indeed, distinctions are being made between formal and non-formal learning activities. Formal learning is mostly further coded by ISCED levels, the International Standard Classification of Education, developed by UNESCO. This is widely used in the education field, although not without certain levels of criticism of it being too vague, which we share (see e.g. Schneider, 2010). ISCED gives us an indication of whether the level of formal adult education attended is comparable to that of primary, upper or lower secondary or tertiary education, but can take place in a variety of types of provision, and thus needs to be – again – further broken down. At the level of non-formal education and training, categories being used in the surveys are presented in Table 1. While there is thus a certain range of activities presented in survey data, it remains unclear in what *type of education and training provisions* these learning activities take place. It was therefore within our interest to further compare these with other existing classifications of education and training provisions as produced by policy-oriented international organisations, going beyond the classic divide between formal and non-formal education and training.

[TABLE 1 HERE]

TABLE 1 Types of learning activities in the major surveys

PIAAC	AES	LFS	CVTS
-organised sessions for on-the-job training or training by supervisors or colleagues; -seminars or workshops;	-non-formal guided on-the-job training; -non-formal activities delivered through distance learning; -computer-based learning;	-attending a course or seminar to acquire or improve skills, knowledge and competences which may or may not lead to certification;	-organised taught training activities -guided on-the-job training', 'job rotation, exchanges, secondments or study visits;

- courses conducted through open or distance learning; -course or private lessons not already reported. Focus: mainly job-related or not.	-non-formal private lessons and course. Focus: related to a current job, a planned future job, or voluntary work.	-attending a seminar, a course or lecture to gain vocational guidance, to do a first step to working life (but outside formal education) or to improve basic skills in public or private institutions; -doing a correspondence course; -distance learning; -taking private lessons to improve skills, knowledge and competences, especially as a supplement to formal education. Focus: mainly job-related or personal/social.	-participation (instruction received) in conferences, workshops, trade fairs and lectures; - self-directed learning/elearning. Focus: related to current job or workplace.

In reviewing, we scrutinized documents from the European Commission, the OECD and UNESCO to search for classifications. The leading classification seemed to be the one constructed by Eurydice, the European network exploring educational systems in Europe at all levels, ranging from pre-school education to adult education. In relation to education and training for adults, the following types have been distinguished by them: (1) provision to raise achievement in basic skills, (2) provision to achieve a recognised qualification during adulthood, (3) provision targeting the transition to the labour market, (4) provision of liberal (popular) adult education and (5) other types of publicly subsidised provision for adult learners. While this classification is useful, and has attention for low-educated adults for sure, the Eurydice focus is on publicly funded initiatives only. This wipes out the role of education and training provision that takes place at work by private employers and other privately funded initiatives. Recent statistics from surveys indicate that workplace learning represents the largest part of the overall lifelong learning statistic (CEDEFOP, 2015; work by author).

An important focus on the increase of participation for non-traditional learners is on the need for employers to recognise the need to invest in education and training of their employees. In comparing documents, Eurydice's category on 'provision targeting the transition to labour market' can be rather broad. Nowadays, a focus on apprenticeships is visible in other countries than the traditionally strong VET countries like Germany. The European Commission itself has also sponsored a wide range of programmes initiatives like Youth Guarantee and more recently Upskilling Pathways. At the European level, the work by CEDEFOP (2008) also gives useful insights on the need to further diversify the role of labour market oriented provisions. They specifically focus on the role of accessible post-secondary VET for those who cannot continue into academic tertiary tracks, but who do possess the qualifications and skills to undertake post-secondary education. This seemed a meaningful further expansion of labour market training that fits with our definition of target group – those who do not have qualifications of upper secondary school or who are not qualified to enrol for academic tracks of tertiary education. We will be referring back to this later on.

Apart from the major classification as set out by the Eurydice at the European Commission, a few classifications were also found in the academic literature. Work by Myers et al. (2014) distinguished between (1) foundational learning, (2) higher education, (3) workplace-related learning, (4) other labour market-related learning and (5) personal/social learning. Desjardins (2017) used the following categorisations: (1) adult basic and general education, (2) adult higher education, (3) adult vocational education and (4) adult liberal education. These typologies were not constructed specifically to reflect on low-educated learners and therefore include categories like academic streams of higher education, which was beyond the scope of our classification review exercise. We also faced a need to further specify the vocational education components, similar to our findings scrutinising Eurydice work against CEDEFOP reports. Many low-educated adults in society face additional problems, such as unemployment or employment in low skill low pay jobs. A typology we looked at that has taken the diversification of vocational training more into account was published by Hefler and Markowitsch (2013). They distinguished between (1) basic skills and remedy programmes, (2) second chance education, (3) higher education programmes accessible for non-traditional (adult) students, (4) (occupational (re)training programmes, (5) costumised vocational and professional programmes for organisations, (post-tertiary) continuing higher education and (6) continuing professional education governed by professional bodies. This categorisation has been helpful to diversify the general typologies. We also felt this typology

brought out again the need to diversify between basic education and second chance education, especially while working with a target group of low-educated adults. This important nuance in provision for the lowest educated got lost in the categorisations by Desjardins (2017) and Meyers et al. (2014). Hefler and Markowitsch (2013) focussed on vocational training, which thus limits the role for recognising the aim of education and training for empowerment, social cohesion and active citizenship. As discussed above, recognising the non-monetary benefits of lifelong learning is important as well. As such, we did not want to lose the focus on adult liberal education and learning for social and personal development.

Having reviewed survey instruments, policy and academic-oriented literature, we can return to our initial questions and observe that categorisations of learning provisions are available, but that typologies do not specifically focus on low-educated adults. Some categories in the existing typologies do have this focus, however, none of the existing ones provided a satisfactory categorisations for our target group. Therefore, we decided to present our own typology of learning provisions for low-educated adults. As explained above, these were defined as those who did not finalise secondary schooling or who lack starting qualifications to make the transition towards academic tracks of higher education.

SEVEN CATEGORIES OF PROVISION FOR LOW-EDUCATED ADULTS

Having carefully familiarised ourselves with the existing typologies as discussed above, and furthering the need to focus on low-education adults, the following seven categories were included in a newly constructed typology: (1) basic skills and basic education, (2) second chance education at upper secondary levels, (3) post-secondary VET, (4) apprenticeships, (5) training that forms part of Active Labour Market Policies, (6) workplace or job-related learning and (7) personal or social learning. An overview of the typology and the definition we constructed for each of the categories can be found in Table 2.

[TABLE 2 HERE]

TABLE 2 Overview of definitions of the seven types of provision

PROVISION TYPE	DEFINITION
Basic skills and basic education	Basic skills and basic education' as a category refers to adult participation in learning at an education level equivalent to primary or early secondary education, intended to act as the

	foundation for further learning, low skill employment, or forms of active citizenship.
Second chance education at upper secondary levels	The category of 'second chance education at upper secondary levels' refers to adult participation in learning at a level equivalent to upper secondary education, intended to act as a foundation for learning at tertiary level, intermediate skill employment, or forms of active citizenship.
Post-secondary VET	The focus of this category is on adult participation in VET at post-secondary levels, intended to prepare for employment in a specified occupation or sector, or to provide access to other tertiary or post-tertiary education.
Apprenticeships	Apprenticeships are therefore as employees' participation in dual training programmes in a specific occupation leading to recognised professional qualifications.
Training that forms part of Active Labour Market Policies	Training as part of ALMPs may be defined as participation in work-related activity, either voluntary or mandatory, by those unemployed, at risk of unemployment, or those requiring support to make the transition into employment.
Workplace and job-related learning	Workplace and job-related learning is defined as participation by employed persons in learning activities within and relevant to the workplace that are not part of the formal education system.
Personal and social learning	Personal or social learning is the term used to define participation in non-formal non-job related learning activities that may serve the purposes of providing personal or social benefit.

Basic skills and basic education was found to be a strong type to start our categorization with. Some of the previous typologies focused on basic education in its own right and it strongly linked back to observations that participation rates are mostly low among low educated adults, who often lack basic skills. The need for solid basic skills is also high on the

agenda at the leading international organisations interested in lifelong learning. UNESCO UIL (2016a) has a long traditional of focussing on key skills like literacy and numeracy. The OECD's world influencing testing of skills is a key part of their assessment surveys like PISA and PIAAC (OECD, 2016). The European Commission has recently kick-started the Upskilling Pathways scheme, which aims to help adults struggling with literacy, numeracy and digital skills. In Europe, it is estimated that around 70 million struggle with these basic skills (European Commission, 2018). Given the strong focus on basic skills in the international policy sphere, its presence in previous typologies, and the focus of our own project, we decided to make it a core category in our new typology.

Second chance education at upper secondary levels was taken as our second category. Some would argue that basic skills education is a form of second chance education, and typologies by Meyers et al. (2014) and Desjardins (2017) indeed grouped these together. We felt the need to distinguish between training in the fundamental skills that many low-educated adults lack, and their participation in credential-based programmes letting people work towards a final qualification of secondary school. This is very important as a final diploma of upper secondary education is nowadays widely regarded as they minimum level of qualification to be obtained in order to successfully function in society. It therefore provides a chance to those, for whatever reason, left school before completion, as indicated by UNESCO UIS (2011). Similarly, one of the top goals in relation to education and training at the level of the European Commission is to raise educational attainment of the population, starting with seeing upper secondary education as the minimum requirement everyone needs to meet. While the focus of the Second Work Package of our project is strongly on the lowest educated adults, and the cumulative disadvantaged they experience in life, we have to acknowledge that there will still be variation within this group. We therefore perceived it as essential to keep this distinction between basic skills education and second chance education.

Post-secondary VET was included as our third category as we wanted to diversify the vocational and labour market orientation of education and training provision. As outlined above, our focus was on those who did not finalise secondary education or who do not have the starting qualifications to go to academic tracks of tertiary education. In accordance with work published by UNESCO UIL (2016b), VET is an important part of the wider lifelong learning field, and can take place at various levels, also at post-secondary level. The OECD (2010) also refers to VET as an important way of training people for particular jobs or types of jobs, which is also recognised by the European Commission (Eurostat, 2017). It can be

argued whether those going into post-secondary VET are still low educated, as they are likely to have gained qualifications at secondary level, however, including this category seemed important to pay attention to alternative routes to going to academic tertiary education. Post-secondary VET was also recommended as an important alternative route by CEDEFOP. In many societies, academic tracks are still perceived as 'better' than vocational tracks. In German and Dutch speaking countries, with stronger VET provision, vocational tracks are often perceived as less prestigious than the academic routes followed by students from mainly middle class backgrounds. Nevertheless, vocational education and training can help adults to master a range of skills and knowledge specifically targeted towards a specific job or type of employment. It moves away from the more general academic knowledge expected in non-vocational tracks and is strongly in need of a better overall reputation in the field of education and training. Post-compulsory vocational education and training can act as an ideal pathway for those not ready to make the transition to traditional routes of higher education, but wishing to continue their education and training. It is important to undertake more research into this pathway and to further understand the benefits in can generate. This is needed to provide more evidence-base on its potential qualities.

Apprenticeships as a fourth category helped us in further diversifying the focus on vocational and labour market oriented provision. Organisations like OECD (2009a), the European Commission (2013) but also the International Labour Organisation (2012) have focussed on the role of apprenticeships. They all focus on the alternation between formal schooling and participation in labour market activities. They have also discussed the credential-based focus of apprenticeships. Looking deeper into this type of provision, we were convinced it needed to be an important category in our typology, because it moves away the focus from education to the labour market and might therefore be a suitable pathway for younger adults who are fed up with the schooling system. This duality has also been recognised as an important model in, for example, European projects funded under the Youth Guarantee Scheme. One of the weaknesses of apprenticeships is that they seem to exclusively focus on the situation of adolescents and younger adults. It has been hard to find information about access to apprenticeships for adults above the ages of 25 or 30.

Training that forms part of Active Labour Market Policies has been defined as our fifth category and was also present in previous typologies. Low-educated adults tend to suffer more from unemployment or employment in elementary jobs than highly educated adults do. They often experience cumulative disadvantages. We therefore thought it made sense to

construct a separate category specifically for those who are out of work, such as the longterm unemployed who need help in returning to the labour market (UnescoUNEVOC/NCVER, 2009). In fact, especially in relation to younger people in Europe, the term NEETs – those not in Employment, Education and Training – is often used, further highlighting the role of cumulative disadvantages. The OECD also defines ALMP training as programmes aimed to promote and provide transition into employment, as does the European Commission (OECD Glossary of Statistical terms, accessed February 2017; European Commission/EACEA/Eurydice, 2015). While this category is technically not only available to low-educated adults, it is key to understand that educational attainment and skills are key components in finding a job, and that those lacking qualifications thus need to be supported if they want to be in employment. We therefore decided it to include it as a separate type in our typology focussing on the needs of low-educated adults.

Workplace or job-related learning has been included as our sixth category. It is less obvious to include workplace learning in a typology of provisions that focuses on the role of learning opportunities that focuses on low-educated adults. As discussed above, they are more likely to be in weaker positions in the labour market (Author, 2016). But this has also been our rationale for including this category. If we want all adults to contribute to the knowledge economy, it will be important for employers to create a culture in which all employees receive chances to further develop themselves, regardless of their position or educational attainment. This can mean the creation of a positive learning climate at work, or the inclusion of specific learning activities as part of working arrangements (Unesco-UNEVOC/NCVER, 2009). As discussed above, the Eurydice typology, the most commonly used typology by the European Commission, exclusively focussed on publicly funded types of provision. Given the strong dominance of job-related lifelong learning participation in statistics, workplace learning seems a potential area for inclusion of more diverse groups.

Personal or social learning as a seventh category moves our focus again away from the strong work-related nature of lifelong learning (see Holford & Mohorcic-Spolar, 2012). This is strongly in line with the UNESCO ideology, which also promotes adult learning for active citizenship and community cohesion (Unesco Institute for Lifelong Learning, 2016a). In this regard, the European Commission has also discussed the role of 'liberal adult education' as providing opportunities for personal development and cultural enrichment (European Commission/EACEA/Eurydice, 2015). We fully acknowledge that work-related forms of education and training are important, so that everyone can make a valuable contribution to

the knowledge based economy. As already stated above, we also want to underline that it is important to provide learning opportunities for personal and social development. Low-educated adults can profit from these in relation to personal growth and the increase of their own active citizenship. It was therefore judged to be important for inclusion in our typology.

DISCUSSION AND CONCLUSION

Returning to the initial aims of our review exercise, we can reinforce that we did found a number of general categorisations of adult lifelong learning provisions in the policy-oriented and academic literature. However, none of them were specifically designed to explore learning opportunities for low-educated adults, who tend to be most in need for education that can compensate their earlier skills deficits. As a result of this review, we decided to construct our own typology, consisting of seven categories as discussed above. However, having undertaken this exercise, it is important to provide some critical comments on our own work and discussion the limitations.

First of all, as with most typologies constructed in social sciences, a strict categorisation of education and training provisions is somewhat artificial and it can be argued that some of the categories we defined can be taken together. A clear example includes the focus on vocational education and training and apprenticeships which might interrelate with each other in certain country contexts. However, in light of our focus on the most vulnerable adults in society, we preferred to distinguish between the different types as clearly as possible in order to make our audience aware of the different schemes that are available for our target group, who is much in need of attention from policy makers and society alike. Going back to the earlier sections of this paper, we criticised the lack of specific categorisations for specific groups of adults like the low-educated ones, such as is the case with, for example, the one constructed by Eurydice, and it was our aim to not lose this specific focus out of our review exercise.

Secondly, as mentioned above, we see this typology as a contribution to the knowledge base on education and training provisions tailored towards low-educated adults in society. We therefore hope it will be used as a framework by other scholars working around the education and training of low-educated adults. As a starting point, this is what we will be doing ourselves in the next phase of our own Horizon 2020 project. In further understanding the availability of explicit provides, and to better capture the experiences of adult learners themselves, we need to have a structural frame in place from which we can sample in a range

of European countries. Based on a comparative method, it is important to understand the role of education and training provisions in different countries embedded in their historical, political, economic and social context (see Bereday, 1964) and from there onwards to understand the experiences of both adult learners themselves, but also to further disentangle how adult educators and education and training managers in these institutional settings aim to facilitate the learning of these vulnerable adults.

As explained above, participation in education and training is the result of an interaction between the (potential) adult learners, the education and training institutions available to them and the way in which the different countries are regulating these provisions and encouraging adults to participate (see Figure 1). It is this multilevel way of thinking that is crucial to furthering our understanding of how to attract more learners who are in such a need of extra training. As discussed above, we know that adults at the intersection of being low education and unemployed or in low employment receive fewest chances to participate in further learning. We know that adult learning participation rates significantly differ between countries. The role of educational provisions in generating participation largely remains a 'black box'. It is our aim to further investigate this area, specifically in relation to those groups who do traditionally not participate in adult education and training activities.

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